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ΜΕΤΑΠΤΥΧΙΑΚΌ ΠΡΟΓΡΑΜΜΑ ΣΠΟΥΔΩΝ «ΔΙΟΙΚΗΣΗ ΕΠΙΧΕΙΡΗΣΕΩΝ»

ΔΙΑΤΡΙΒΗ ΕΠΙΠΕΔΟΥ ΜΑΣΤΕΡ

CTC AUTOMOTIVE LTD aims to develop a business plan for the Marine, Oil & Gas sector in Cyprus: A New Market Development Project, indicating to the contribution of CTC's business plan for CATERPILLAR brand.

ΔΗΜΗΤΡΗΣ ΖΑΓΓΟΥΛΟΣ

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PREFACE

This report describes project work carried out in the Faculty of the Business School at the Open University of Cyprus in Nicosia, between October, 2014 and May, 2015.

The submission of the report is in accordance with the requirements for the award of the degree of *Masters in Business Administration* under the auspices of the University.

The author hereby declares that this work has not been previously submitted for the award of degree to his knowledge. All references are identified as well as any other source information.

DEDICATION

To my beautiful children, Costas, Pampos and Fanos, and especially to my lovely wife Maria,

For all of the moral support, during this period.

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ABSTRACT

During the last five years, Cyprus Economy experiences one of its biggest drawbacks ever. The sector that has been impacted mostly, due to this negative situation is definitely the construction industry. A decrease of more than 60% of the construction activity compared to the figures of 2010, illustrates clearly the size of the problem. Therefore, this has a direct relation and it has negatively affected CTC's - Caterpillar core business; which was until now the Earth Moving Equipment.

On the other hand, the starting of operation of the VTTV terminal last November, in Vassilikos; flags the creation of a new market for Cyprus – the Marine, Oil & Gas sector. The strategic location of the terminal creates the opportunity for fast and vast development of that specific sector. In particular, the strategic location of the terminal makes it the first of its kind in the Eastern Mediterranean, connecting Europe and the Black Sea with markets in the Middle East and Asia. The asset currently comprises 28 tanks and capacity of 544,000 m³, and offers access to a deep water marine jetty as well as to road tanker loading facilities.

Furthermore, some additional reasons listed below lead to CTC's decision to justify whether it will be profitable to invest in the Marine, Oil & Gas sector through its CATERPILLAR product range:

- The proven and estimated natural gas reserves in the Eastern Mediterranean region. A
 region for which Cyprus could become the mid-point between Europe and Middle
 East.
- 2. The findings of natural gas in Cyprus Exclusivity Economic Zone, is an additional reason that leads CTC to make a step forward to this new market development.
- 3. The start of the operations of Vassilikos Terminal, as it has been already mentioned.

Therefore, it is clearly shown that the orientation of CATERPILLAR's core business in Cyprus should change and move forward to sectors like Energy and Marine. By describing CATERPILLAR customers' profile that CTC should focus on during the next few years, the following market segments have been identified:

Earth Moving and Heavy Machineries Segment: CTC targets to the big and well known Construction & Development Companies, to Quarries & Mining Companies, as well as Small Private Companies that owned from one up to five machines.

- Marine Pleasure Segment: CTC targets the yachts' owners that have their yachts in one of the Marinas on the island, as well as to some yachting builders.
- Marine Commercial Segment: CTC targets the Offshore Companies that owns the ships or the Ship Agents that has the responsibility of the marine jetties that they will stop to unload fuels at the VTTV terminal and at the Ship Builders (i.e. DAMEN) that request service-warranty support for ships that have been delivered to our territory.
- ➤ Oil & Gas Segment: CTC targets the Offshore Companies that are operating in the Oil & Gas Industry. In the last couple of years there is an activity in the Middle East Region, from organizations like Total, Eni-Kogas etc.

Having determined the above four market segments, it should be noted that the first two already exist and CTC has already been involved and has invested money and time; however, both the Marine Commercial Segment as well as the Oil & Gas Segment are new markets for the CATERPILLAR Dealer in Cyprus. Thus, the main aim of this current thesis-project is to propose some business actions of how CTC will apply a New Market Development Plan, in order to get involved in the Marine Commercial, Oil & Gas sector through its CATERPILLAR Products and Product Support Services.

ПЕРІЛНЧН

Ως εργαζόμενος στην CTC AUTOMOTIVE LTD – επίσημου αντιπροσώπου της CATERPILLAR στην Κύπρο, η οποία ανήκει στον όμιλο εταιρειών Σιακόλα («NKS Group of Companies») - και μέσα από την καθημερινότητα της δουλειάς μας, έχει παρατηρηθεί τα τελευταία δύο χρόνια μία σταδιακή αυξανόμενη ζήτηση από μεγάλες υπεράκτιες εταιρείες για παροχή τεχνικών υπηρεσιών, σε εμπορικά πλοία τα οποία φέρουν μηχανές CATERPILLAR. Ο συγκεκριμένος τομέας είναι κάτι εντελώς καινούριο για την CTC Automotive LTD, ενώ παράλληλα έχει ξεκινήσει να διαφαίνεται ευκαιρία ανάπτυξης στον κλάδο των Πετρελαίων και Φυσικού Αερίου, λόγω ακριβώς της κινητικότητας που παρατηρείται τόσο στην Κυπριακή ΑΟΖ όσο και στην ευρύτερη περιοχή της Ανατολικής Μεσογείου.

Ως εκ τούτου, έχει διαπιστωθεί η ανάγκη από την διοίκηση της εταιρείας μας, για διεξαγωγή μιας ακαδημαϊκής μελέτης, μέσα από την οποία θα πρέπει να εξεταστούν οι διάφοροι παράγοντες που επηρεάζουν τους συγκεκριμένους κλάδους και στο τέλος - εάν είναι δυνατό - να εξαχθούν κάποια χρήσιμα συμπεράσματα σχετικά με τον τρόπο που θα πρέπει η εταιρεία μας να αναπτύξει τις κατάλληλες υποδομές έτσι ώστε να μπορέσει να ανταποκριθεί στην αυξανόμενη ανάγκη που αναμένεται τα επόμενα χρόνια στους τομείς της Εμπορικής Ναυτιλίας, Πετρελαίου και Φυσικού Αερίου (Marine Commercial, Oil & Gas Sectors).

Σημειώνεται, ότι όλα αυτά συμβαίνουν σε μια εποχή κατά την οποία η κυπριακή οικονομία παρουσιάζει την μεγαλύτερη της ύφεση μετά την Τουρκική εισβολή του 1974, ενώ σε σύγκριση με το 2010 η οικοδομική βιομηχανία στην οποία στηριζόταν η μάρκα της CATRPILLAR στην Κύπρο, έχει συρρικνωθεί κατά 60%. Το γεγονός αυτό καθιστά αναγκαίο, να αναζητηθούν τομείς στους οποίους τόσο τα προϊόντα όσο και οι υπηρεσίες της CATERPILLAR, μπορούν να κερδίσουν μερίδιο αγοράς.

Επομένως, μέσα από την παρούσα εργασία θα γίνει μια προσπάθεια για ανάλυση των παραγόντων που επηρεάζουν τον συγκεκριμένο κλάδο, ενώ θα καταγραφεί το θεωρητικό υπόβαθρο που έχει να κάνει με την ανάπτυξη μια νέας αγοράς («New Market Development»). Η σύνδεση των δύο αυτών στοιχείων, θα έχει ως τελικό στόχο την δημιουργία και την παρουσίαση ενός «Επιχειρηματικού Πλάνου», μέσα από το οποίο θα γίνονται εισηγήσεις για δράσεις από την πλευρά της CTC AUTOMOTIVE LTD, τόσο σε βραχυπρόθεσμο όσο και σε μακροπρόθεσμο ορίζοντα.

Τέλος, σκοπός της εν λόγω μεταπτυχιακής διατριβής είναι να αποτελέσει ένα εργαλείο στα χέρια της διοίκησης της εταιρείας για την περαιτέρω ανάπτυξη της στους τομείς της Εμπορικής Ναυτιλίας, Πετρελαίου και Φυσικού Αερίου.

Chapter 1

INTRODUCTION TO THE THESIS

1.1 GENERAL INFORMATION

The author's decision to work on a project associated to his current job responsibilities, came after several discussions along with the General Manager of CTC Automotive Ltd, the HR department of CTC and of course with the coach professor in the MBA Program of the Open University of Cyprus, Mr. Costas Hadjiyiannis. All of them, agreed upon the fact that a project related to CTC's "product range" will make it, much more interesting, useful and beneficial; for both, the author and the company.

Furthermore, during the last two years the author had the opportunity to keep a constant communication with some of the CATERPILLAR's employees that are responsible for Cyprus market which is a part of EAME Region; therefore, he was repeatedly being advised to choose a subject that would be related to the Marine Commercial, Oil and Gas Industry. The ability to work on a project that combines theoretical literature related to the new market development, along with the objective of CTC Automotive Ltd to empower and enhance the provided CATERPILLAR Services and Product Range to the local market; creates the opportunity to use the current thesis-project, as a tool for the company's future business plan.

Since the thesis' subject is related to the new market development, some theoretical information and literature, have been included related to this matter. Moreover, some key definitions related to certain industries (Marine Commercial, Oil & Gas) that the current thesis will try to elaborate on, they will also be part of the project. In addition, the particularities of the local market (size, geopolitical conditions etc.) will also be included in the subjects of the project.

As it has been already thoroughly described in the abstract, the project contends with the development of a new market for Caterpillar's Services and Products, in Cyprus. A structural approach will be used, in order to identify if it could be viable for CTC Automotive Ltd to invest on the Caterpillar Marine Commercial, Oil and Gas business. Through the detailed analysis of the several factors that are related to that industry, certain suggestions and conclusions will be made.

1.2 AIMS AND OBJECTIVES

The main objective of the thesis project is to identify whether there is a new market development opportunity, related to CATERPILLAR products and services that could be provided by CTC Automotive Ltd; which is the official CAT Dealer in Cyprus. Due to the activity, that it has been observed locally during the last few years in both, the Marine Commercial sector as well as the Oil & Gas sector; we would like to justify if there is a real opportunity for development on those two particular sectors. Moreover, a proposed business plan for the development of the new markets will be the main result of our analysis.

1.3 METHODOLOGY

By using the literature for New Market Development strategies and by having collected all of the published information related to the local developments related to our CAT product and service range; a work framework will be specified.

The whole procedure of collecting and analyzing information requires a series of activities such as discussions, teamwork and brainstorming sessions between the management team of CTC Automotive Ltd. Furthermore, gathering information through short interviews with people that are involved in the Marine Commercial, Oil and Gas Industry is part of our research.

Moreover, our participation in the Euro Med Oil & Gas Exploration and Production Summit, held in Limassol in October 2014 as well as our attendance at The European Mediterranean Offshore Oil & Gas Services, Certification, Classification & Standards conference, last May 2015; were a valid and important resource for collecting useful information about our project.

Finally, it is clear that effective timing, a well –thought structure, access to resources and data, as well as commitment and dedication on this important matter are critical and essential elements for meeting successfully our ultimate goal; which is the creation of a tool for CTC Automotive Ltd's management team, in regards to their future decisions for investments in Marine Commercial, Oil & Gas business through CATERPILLAR Product & Services.

1.4 PROJECT PLAN

The project lasted approximately 8 months in duration, starting from October, 2014 until May, 2015. The following comprise a plan of work and the steps that have been followed throughout the prescribed time period:

- 1. In September, 2014 CTC Automotive Ltd decided to advocate a business plan through which the CATERPILLAR Brand would expand its activities in Cyprus, in other Industries such as Marine Commercial, Oil & Gas.
- 2. In October, 2014 the author participated in the Euro Med Oil & Gas Exploration and Production Summit, held in Limassol; and gave a positive feedback to the CTC's Top-Management Team regarding the potential and opportunities that appear from the development of those sectors locally.
- 3. During the next two months November, December a general business plan was contracted from CTC Automotive Ltd Management Team and presented to CATERPILLAR's principles. One of the commitments of that business plan was the execution and completion of the current thesis project.
- 4. From January until March, 2015 there was a continuous effort to gather information related to the subject and the goals of the thesis, and on the other hand and parallel to that, was the practical and every-day work to apply an effective and efficient business plan. All of the information was collected from written resources, from specific websites as well from our participation to the conferences and through some interviews with some of key-persons involved in Marine Commercial, Oil & Gas Business.
- 5. Last April and May, all of the information that was gathered in the previous steps; were assessed and put in place in the present document; after the approval of the CTC's top-management team.
- 6. Present our research to CATEPRILLAR principles, and convert the information gathered, to a business plan for the development of the Marine Commercial, Oil & Gas sectors.

1.5 THESIS STRUCTURE AND CONTENTS

A brief outline and description of the structure and the contents of this report is given below:

Chapter 2

This chapter has been dedicated to some bits of history of CATERPILLAR and CTC, as well as a brief description of CATERPILLAR's product Range. Moreover, a snapshot of CATERPILLAR's regions worldwide is also presented aiming to show where Cyprus is located as a market.

Chapter 3

As it has been already mentioned, the main goal of the current thesis is to examine a business plan based on a new market development program. Therefore, it was essential to dedicate a chapter on the business development strategies based on which our business plan will be built upon.

Chapter 4

One of the most important and interesting chapters of the current thesis is Chapter 4. The reader can see and get a good understanding of the regional realities, in regards to the oil and gas reserves and can also clearly realize the potentials of the region as well as of Cyprus. Some key figures are presented and some important information regarding to the regional oil and gas sector are given, aiming to the possibility for Cyprus to become a regional energy hub.

Chapter 5

In this chapter, a deeper analysis of CATERPILLAR's product segments is given, in order to give the chance to the reader to get a better understanding of the products and the application of the Marine Commercial and Petroleum Industry. Furthermore, it was essential to present briefly all of the companies that are already involved in the local as well as in the regional market (Eastern Mediterranean Region).

Chapter 6

Having presented all of the factors that accompanied the business environment around the Marine Commercial and Petroleum Sector in Cyprus as well as in the Region, we finally propose some actions that will help CTC to adequately respond to Caterpillars' customers. The proposals are always aligned with CTC's available resources and capital investments, in order to respond efficiently to the "transition" stage to the new era for the local market.

Chapter 2

BRAND AND COMPANY

2.1 HISTORY OF CATERPILLAR

The Caterpillar story dates back to the late 1800s with Daniel Best and Benjamin Holt independently experimenting with ways to fulfill the promise steam tractors held for farming. Throughout its history, Caterpillar has been making sustainable progress possible around the globe.

In 1883, brothers Charles and Benjamin Holt established the "Stockton Wheel Company" in Stockton, California, to sell wagon wheels and other blacksmithing supplies. In 1885, another individual - Daniel Best established "The Daniel Best Agricultural Works", which manufactured combined harvesters, grain cleaners and separators. Meanwhile, the Holts decided to add agricultural machines to their wagon wheel business. In 1886, Benjamin Holt introduced his first combined harvester, driven by linked belting and sprockets instead of gears. This was a significant improvement over the geared designs made by other manufacturers. Over the years, several innovative solutions for the agriculture and farm sectors have been invented from both Holt's brothers and Daniel Best. However, a turning point was in 1889, when Daniel Best introduced his first steam traction engine tractor and almost immediately, decided to pair his machine with a combined harvester.

Export markets proved profitable for both Holt and Best steamers and by the turn of the century, Holt steam traction engine tractors had found their way to Australia, Kenya, South Africa, Mexico and Europe. One of the first Best steam traction engine tractors went to the Sandwich Islands, known today as Hawaii. Before long, Best steamers began working in Siberia and elsewhere in Russia. A year later, Benjamin Holt followed with his first steam traction engine tractor. At first, most of them were used for farming. But freighting quickly became a major market for steam traction engine tractors – especially for transporting lumber, ores and supplies.

Following a growing trend and by inventing a lot of other engineering innovates, in 1910 Holts produced the first gasoline-powered track-type tractors which was trademarked as "Caterpillar", and it has remained the sole property of the Caterpillar organization to this day. By 1925, the Best and Holt companies developed different strengths. Best's company had the beginnings of a better dealer network, better financial status and more advanced tractor

design. The Holt organization had a worldwide reputation and name, bigger factories, a 40-year-old combined harvester line and the Caterpillar trademark.

In April 1925, a group of investors purchased the C.L. Best Tractor Co. and The Holt Manufacturing Company and merged them into this new corporation. That was the birth of the "Caterpillar Tractor Co." that was formed with the intent to manufacture track-type tractors.

Nowadays "Caterpillar Inc." is a corporation which designs, manufactures, markets and sells machinery, engines, financial products and insurance to customers via a worldwide dealer network. Caterpillar is considered as the global leader in construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives. With more than US\$89 billion in assets, Caterpillar was ranked number one in its industry in 2009.

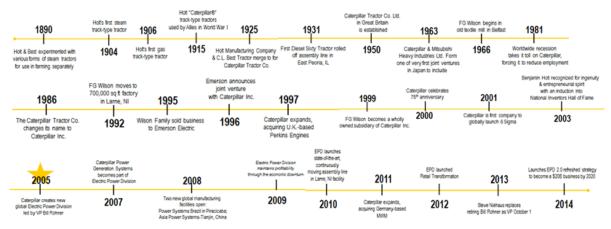


Figure 2.1: CATERPILLAR History – Timeline

2.2 HISTORY OF CTC

Cyprus Trading Corporation Plc, was established back in 1927 and today it is the biggest trading organization in Cyprus. It is a public organization and is listed in the Cyprus stock Exchange. The Major shareholder is N.K. Shacolas (Holdings) Ltd.

With operations such as importing, distributing and logistics of branded fast moving consumer goods, luxury cosmetics and fragrances, retail of fashion, DIY goods and home appliances, automotive and engineering offering saloon and commercial vehicles, heavy machinery, professional tools and lighting, property development and management of major projects like chains of retail outlets, shopping malls, golf courses and finally with infrastructure projects such as the 25-year contract with Cyprus Government for building and operating with international strategic partners, Larnaca and Pafos airports with the

BOT Method (Build, Operate, Transfer). CTC is considered as the largest private group of companies in Cyprus.

Despite the diversity of activities, one of the main strengths of CTC is the ability to remain focused on each category of products and services. Through its structure and systems, the culture of the organization empowers autonomous, fully focused teams of skilled professionals who passionately pursue their objectives.

Caterpillar brand is under the control of "CTC AUTOMOTIVE LTD", which is the official CAT Dealer in Cyprus, since 1938. CTC Automotive Ltd also represent brands such as VOLVO and HYUNDAI passenger cars, IVECO and SCANIA commercial trucks, HILTI professional tools, and PHILIPS lighting products. Furthermore - as already mentioned - CATERPILLAR is also represented by "CTC AUTOMOTIVE LTD"; with heavy machine products (i.e. wheel loaders, dozers, dumpers, backhoes, skid steers), power systems and engines (i.e. civil generator sets, industrial engines, pleasure crafts marine engines). At this point, it should be mentioned that due to the small size of the local market, only a small portion of the huge product range of CATERPILLAR products is presented, in Cyprus. The next subchapter provides information with more details, regarding the full range of CATERPILLAR products.

2.3 CATERPILLAR'S PRODUCT RANGE

"Caterpillar Inc.", designs, manufactures and sells machineries, engines, financial products and insurance to customers through its dealer's network worldwide. Basically, it is the world's leader manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel - electric locomotives. In addition, it provides technology for transportation, forestry, energy, logistics, electronics and electric power generation. "Caterpillar Inc." operates in four major product segments:

- 1. Construction Industries
- 2. Resource Industries
- 3. Power Systems.
- 4. Financial Products

2.3.1 Construction Industries

Construction Industries include the heavy construction, general construction, mining and quarry, and aggregates markets. The products that the company sells in this segment are

backhoe loaders, small wheel loaders, medium wheel loaders, compact wheel loaders, mini excavators, pipe layers, medium track-type tractors and motor graders. Major competitors in this segment are Komatsu Ltd., Volvo Construction Equipment (part of the Volvo Group), CNH Global Industrial N.V., Deere & Company, Hitachi Construction Machinery Co. Ltd., J.C. Bamford Excavators Ltd., Doosan Infracore Co. Ltd., and Hyundai Construction Equipment (part of Hyundai Heavy Industries).

2.3.2 Resource Industries

The Resource Industries segment provides support to customers using machinery in mine and quarry applications. The products that the company sells in the Resource Industries includes the machines and related parts, electric rope shovels, draglines, hydraulic shovels, drills, highwall miners, underground mining equipment, track-type tractors, mining trucks, electric drive mining trucks, tunnel boring equipment, wheel loaders, off-highway trucks, articulated trucks, wheel tractor scrapers, wheel dozers, compactors, select work tools, forestry products, paving products, machinery components, and electronics and control systems. Major competitors in the Resource Industries segment are again Komatsu Ltd., Joy Global Inc., Hitachi Construction Machinery Co., Ltd., Volvo Construction Equipment (part of Volvo Group), Atlas Copco, Sandvik Mining, Wirtgen, and Deere & Co.

2.3.3 Power Systems

Power Systems segment provides support to customers using reciprocating engines, turbines and related parts across industries serving electric power, industrial, petroleum and marine applications as well as rail-related businesses. The products that the company sells in the Power Systems segment are reciprocating engine powered generator sets; integrated systems used in the electric power generation industry; reciprocating engines and integrated systems and solutions for the marine and petroleum industries; reciprocating engines supplied to the industrial industry, as well as Caterpillar machinery; turbines and turbine-related services, and diesel-electric locomotives and components and other rail-related products and services.

The Company competes with Cummins Inc., Rolls-Royce Power System AG (formerly Tognum AG), GE Oil & Gas, GE Power & Water, Deutz AG and Wartsila Corp. Other competitors, such as MAN Diesel & Turbo SE, Siemens Energy, Rolls-

Royce Energy, Rolls-Royce Marine, Mitsubishi Heavy Industries Ltd., Volvo Penta (part of Volvo Group), Weichai Power Co., Ltd., and Kirloskar Oil Engines Limited.

2.3.4 Financial Products Segment

The Financial Products segment is undertaken by Cat Financial, a wholly owned finance subsidiary of Caterpillar. Cat Financial provides retail and wholesale financing alternatives for Caterpillar products to customers and dealers around the world. Retail financing is the financing of Caterpillar equipment, machinery and engines. In addition to retail financing, Cat Financial provides wholesale financing to Caterpillar dealers and purchases short-term receivables from Caterpillar and its subsidiaries.

2.4 CATERPILLAR'S GLOBE REGIONS

Caterpillar serves customers in more than 180 countries around the globe with more than 300 products with more than five hundred dealer locations worldwide, ensuring that Caterpillar remains geographically close to its global customer base. In particular, CATERPILLAR divides its globe representation in four main regions:

1. Asia Pacific Region (APD) includes Australia, China, India, Japan, New Zealand, South Korea and Southeast Asia. In 2011, nearly 30 percent of Caterpillar sales were generated from the Asia Pacific.

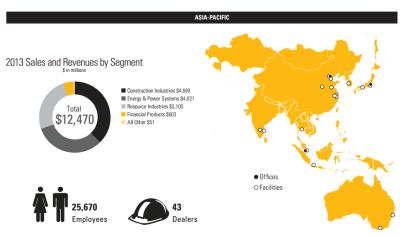


Figure 2.2: Asia Pacific Revenues & number of employees and dealers

2. Europe, Africa & Middle East Region (EAME), is an important manufacturing base and the largest Caterpillar distribution division outside of the United States with approximately 25,000 employees. EAME has more than 680 Cat® dealer locations with more than 26,000 dealer employees, part of which is CTC.

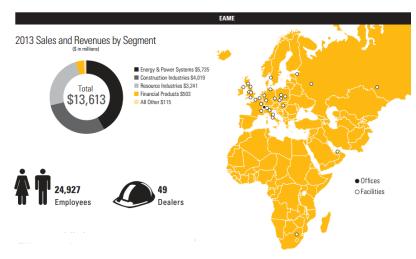


Figure 2.3: EAME Revenues & number of employees and dealers

3. Latin America Region covers all the Latin American Countries, and despite the fact that it has lower revenues compared to the other regions, it is still an important and profitable region.



Figure 2.4: Latin America Revenues & number of employees and dealers

4. North America Region includes United States of America, Canada and Antarctica which is of course the heart of Caterpillar Inc.



Figure 2.5: North America Revenues & number of employees and dealers

Looking at the illustrated maps shown above, someone can easily realize that CATERPILLAR's customers can be found in virtually every corner of the globe, and therefore it can be said that brand success comes directly from helping CATERPILLAR customers to be successful. This is the main philosophy within CATERPILLAR and this is the reason for the success story of the CATERPILLAR brand.

Furthermore, in an effort to give a snapshot of the volume of CATERPILLAR Sales we present the financial figures of 2013. CATERPILLAR being the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives, has a total value of sales and revenues of about €5,7 billion.

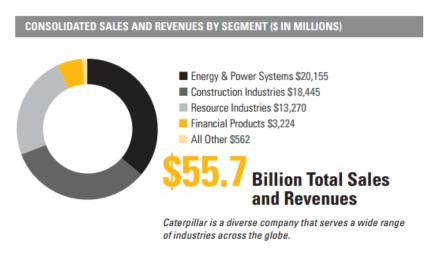


Figure 2.6: Total Sales and Revenues in 2013

As already mentioned, Cyprus is located in Europe, Africa, and the Middle East Region and in particular, - geographically speaking – it is the link between the eastern point of Europe and the growing Middle East region. The significant geographical position of Cyprus is very important in order to understand the relation with the Energy Regions. At this point, it should be stressed that one of the main objectives of this thesis- project is to examine the potential for CATERPILAR products and services from the Marine Commercial, Oil and Gas development in Cyprus.

Chapter 3

NEW MARKET DEVELOPMENT

3.1 NEW MARKET DEVELOPMENT INTRODUCTION

The "New Market Development" can be defined as a type of strategy that aims to achieve growth by introducing existing product range or services in a new market; meaning that, while the product or range of products (or services) remain the same, it is marketed to a new audience. The subject of the current thesis indicates exactly the above mentioned perspective which is the introduction of existing CATERPILLAR products and services to Marine Commercial, Oil & Gas companies; that are something "new" for the local market.

Therefore, the development of new markets for company products or services can be an excellent strategy in case the new market offers better growth prospects compared to the existing ones. It is also important also to note, that a new market development program usually requires high-amount of investments and on the other hand the risks involved are high as well. Hence, a new market involves a great deal of research and all necessary internal and external factors that may affect the successful development of the new market have to be considered in detail.

3.2 NEW MARKET DEVELOPMENT FOR COMPANIES

A company usually follows a market development strategy for a current brand when it expands the potential market through new users or new uses. New users can be found in new geographic segments, new demographic segments, new institutional segments or new psychographic segments. Another way is to expand sales is through new uses for the product.

The key difference between this growth strategy and market penetration is that the definition of the target market must change. In other words, the market potential must increase through this strategy, whereas the market size is "fixed" with a market penetration strategy.

Everybody should be aware that the current economic situation in Cyprus economy is unstable. For the moment it is stagnating and declining. The construction sector of the Cyprus economy is the sector that has been affected the most. As a result, the Automotive & Engineering department of the Cyprus Trading Corporation Plc (CTC) that provides services by selling and maintaining commercial vehicles, heavy machinery and professional tools to

companies and organizations in this sector is also affected. It is therefore necessary for the company to find alternative ways to balance the negative effects of the current situation that prevails in our country and to a large extent affects the financial situation of CTC .One possible way that has been already mentioned is to try to develop a new market. An increased demand for providing technical services to large shipping offshore companies that use CATERPILLAR Engines in their ships has recently been noticed. Additionally, technical services are recently requested in the newly established Vassilikos Terminal by VTTV. These are only some reasons why there is a need for the development of the new Market called Marine Commercial, Oil and Gas.

3.3 STRATEGIC BUSINESS TOOLS

In order to support our business model, it is essential to refer to a number of existing strategies regarding the new market development. In this part of the thesis, a brief reference to some market growth strategies will be shown and some of them will be used in practice in the last chapter of the thesis.

3.3.1 Boston Consulting Group, Growth-Share Matrix

BCG is a global management consulting firm presented all over the world, and it considers amongst the top and most prestigious ones. One of the "tools" that BCG developed a few decades ago (in 1968), which is called the "growth-share matrix", is a simple chart that depicts and helps the organizations decide whether the development of a "Market" requires a big investment; and what the expected return would be.

Relative Market Share

High Low

High Question
Marks

Cash Cows Dogs

Table 1: Growth - Share Matrix (BCG)

As can be seen on the matrix, there are four areas where the product and services of a company can be categorized in. Starting from the bottom right square called "Dogs" we have the business units of a company with low market share in a mature slowing growing industry. Then on the bottom left part of the matrix we have the "Cash Cows" area. In this case, the unit has a high relative market share but still in a slow-growing market; resulting high cash-income for the company with minimum of investment. Then, on the top-right position is the question mark area, the so called "problem children". In this case, the business unit is operating in a high-growth market but with low-market share; indicating high risks for the company. In this case, all of the factors should be thoroughly investigated and analyzed in order to make sure that the potential is to become "stars" and not "dogs" for the company. Therefore, "Stars" are the business units with a high market share in a fast-growing industry; which is an opportunity for the business unit to invest in such a case.

For the purpose of this project, the business unit of Caterpillar within CTC AUTOMOTIVE LTD, and always in regards to the Marine Commercial, Oil and Gas industry can be located in the high-market growth rate with high-relative market share; thus, the unit belongs to the "Star" section of the BCG Matrix. In this case, a lot of investments might need to be made or alternative solutions with lower risks should be found.

3.3.2 Ansoff Matrix

It is also a strategic plan tool for product-market development strategies to provide a framework to help the managers and executives of a company to plan future development. In this case similarly, there is a matrix with four locations; each one of them indicates the type of development plan that should be applied.

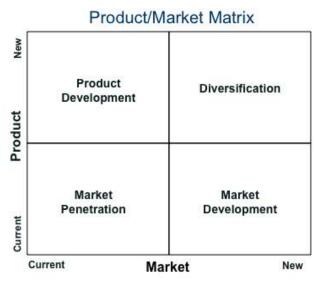


Table 2: Ansoff Matrix

As it can be observed from the matrix above, there is a combination of four areas where:

- In the first-top square, there is a "New Product" in an "Existing Market".
- In the second-top square, there is a "New Product" in a "New Market".
- In the lower-left point, there is an "Existed Product" in an "Existing Market".
- In the lower-left point, there is an "Existed Product" in a "New Market".

The subject of this thesis-project can be categorized under the occasion where a company tries to expand its operations into a "new market", using its "existing products or services". In our case, there is a new customer segment in the local market – which is the Commercial Marine, Oil and Gas – that started operating in the new constructed terminal facility of Vasilikos and CTC AUTOMOTIVE LTD through its existing product range it has a great opportunity to developed and be successful in this area, since it has the advantage to represent Caterpillar products and services which are leading this particular market globally.

However, it should also be mentioned that despite the fact that the "product or services" are considered as "existing"; but the nature of those new sectors for Cyprus are quite new for CTC. Therefore, there is also a part of the case that can be located on the top-right part of the matrix – called so, "diversification". In this case, the things are more risky compared to any other part of the matrix because both product and market development is required. Despite the fact that the "product" as such, exists the "product support" (after sales services) in this type of industry is relatively new.

3.3.3 SWOT and PESTLE Analysis

In addition to the strategic business tools that have already been described, some other tools that will help CTC make a right situation analysis will be used as well.

A brief "SWOT" analysis will be presented here in order to point out all of the "Strengths" and "Weaknesses" of the micro-environment of the company, as well the macro-environment's Opportunities and Threats that rose from the development of the Marine Commercial, Oil & Gas sector.

Thus, all of the four SWOT Analysis factors are illustrated below.

STRENGTHS

CTC is an existing, reputable and profitable company with High Market share, and with strong brand names in its portfolio such as CATERPILLAR, IVECO, SCANIA, VOLVO HYUNDAI, HILTI tools and Philips Lighting. Furthermore, among the strengths of CTC are

the high quality of products and services provided to its customers, and the well experienced, educated and well trained staff.

WEAKNESSES

There is limited "know-how" on the product range of that particular market (Marine Commercial, Oil & Sector) and low-skills abilities of our technical staff. Furthermore, the absence of the physical representation of CTC's Caterpillar division to Limassol is another weak point in its effort for further development.

OPPORTUNITIES & THREATS

All of the opportunities and threats from the macro-environment of the company which involves a variety of factors such as political, economic, social, technological, legal and environmental. Each one of these factors is thoroughly described below, aiming to give a clear perspective.

PESTLE

Political factors

Despite the fact, that all of the political parties state their willingness to support actions for making Cyprus, an Energy Center of the Middle East region; in practice, they behave exactly in the opposite direction. It is amongst the biggest threats. The fact that despite the repeated requests from a lot of international bodies and organizations from Cyprus, to make a decision and create an Energy Port able to cover the needs of the region; nothing has happened the last five years. During our participation, some international forum for Oil & Gas, it was clearly stated from a lot of organizations; that there is a huge delay on behalf of Cyprus Government for making decisions and taking actions. This is a threat that could negatively affect the rapid development of the Marine Commercial, Oil & Gas industry locally.

Economic Factors

The current economic situation of Cyprus is very unstable. For the moment it is stagnating and declining. This factor might be a threat, for companies that would like to invest their money in the local market and in particular in the Marine Commercial, Oil & Gas Business. However, the bad condition of the local economy can be also an opportunity as well. By making decisions, that will make it possible for Cyprus to become an energy center of Middle East, will create a lot of working positions for Cypriots; thus, it could be a solution for the current unemployment problem.

Socio-Cultural Factors

Cypriots are European Citizens with many western habits and behavior. Thus, this can also be used as an opportunity for the development of the Oil & Gas sector; since the International Organizations prefer to operate from a center in Middle East region. Needless to say its workforce is closer to the European mentality and culture.

Technological Factors

The use of high-tech CATERPILAR engines is considered again, an opportunity for the development of the Marine Commercial, Oil & Gas Sector; since there is a trend to use technologies that are friendly to the environment.

Legal Factors

Consumer and Labor rights and laws should be considered in respect to the European and International standards. Selling and distributing products and services requires a good infrastructure in all of the aspects. There is no threat at this point, since Cyprus is using the European and International standards in all of the aspects of the industry.

Environmental factors

The legislation for keeping the environment clean is strict and based on the International and European directions. Therefore, it is essential for every company that will be involved in this "new" – for Cyprus – market, to follow the directives concerning the environment. This is an opportunity factor for CTC, since it represents a brand – CATERPILLAR – which designs its products which are environmentally friendly. Thus, it could be the first choice for any company that will be involved in the Marine Commercial, Oil & Gas sector.

3.3.4 Applied Business tools for the current thesis-project

Most of the theoretical material that is briefly presented above will be used in the last part of the current thesis in order to describe the business plan of CTC AUTOMOTIVE LTD, in regards to its involvement to the Marine Commercial, Oil and Gas Industry. However, it was essential at this point of the thesis to give some theoretical "feedback" that will be used later on, for the preparation and illustration of the Business Plan.

Chapter 4

CYPRUS IN THE REGIONAL ENERGY MAP

4.1 REGIONAL GENERAL CONDITIONS

In this chapter some main definitions and factors will be examined, in an effort to assess the future possibility for Cyprus to become an Energy Hub for the Middle East region. It is very important for CTC to have a clear perspective regarding the potentials for growth of the Oil and Gas sector as well as the Commercial Marine Sector, and this is the objective of the current section of the thesis. However, it should be clearly clarified that a deep analysis of all geological, geographical, political, legal and economic issues were considered before the development of the industries mentioned above, is out of scope of the current thesis.

4.1.1 Geographic Location of Cyprus

According to Britannica Encyclopedia, nowadays the "Middle East" region is defined as, the geographic area which encompasses the territory of Turkey, Cyprus, Syria, Lebanon, Iraq, Iran, Israel, and the West Bank, the Gaza Strip, Jordan, Egypt, Sudan, Libya and the various states and territories of Arabia proper (Saudi Arabia, Kuwait, Yemen, Oman, Bahrain, Qatar, and the Trucial States, or Trucial Oman).



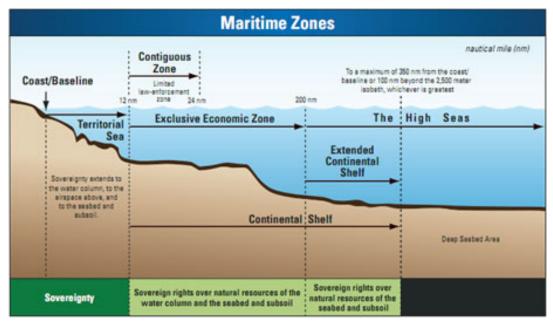
Picture 4.1: Middle East Region

Furthermore, according to Wikipedia the "Greater Middle East" is a political term coined early in the 21st Century to denote various countries pertaining to the Muslim World. As it is clearly indicated from the above brief description, Cyprus is the only country within Middle East region, which is at the same time an official member of the European Union.

However, when talk about for the oil and gas industry or better noted as the hydrocarbon exploration activity, Cyprus is considered as a part of the Eastern Mediterranean region which denotes the counties geographically located in the east of the Mediterranean Sea. This Region is commonly accompanied by the region of Syria plus Cyprus (also known as Levant Basin) including Greece, Turkey and Egypt.

4.1.2 Cyprus Exclusive Economic Zone (EEZ)

According to the UN Convention on the Law of the Sea (so called, UNCLOS¹), marine space is divided within the limits of national jurisdiction into several zones such as, the territorial sea which is up to 12 nautical miles from the baseline, the contiguous zone which is up to an additional 12 nautical miles, the EEZ which is up to 200 nautical miles from the baseline, and the continental shelf which is up to 350 nautical miles.

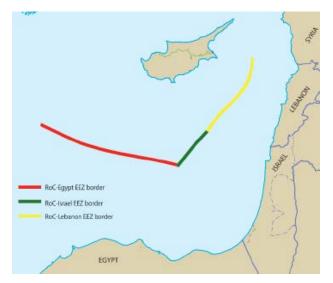


Picture 4.2: Maritime Zones

According to the agreements that have been signed between the Republic of Cyprus and Egypt, Lebanon and Israel, respectively the maritime borders of Cyprus on the south part of the island have been identified and agreed, as is shown below.

Since the Cyprus government, managed to act proactively and sign the agreements with the neighbor-countries mentioned above, through which the boundaries of its EEZ are clearly settled; it has been much easier to go further in regards to the discovery of hydrocarbons in the Eastern Mediterranean sea.

¹ UNCLOS establishes a comprehensive legal regime regulating all uses of the world's seas and oceans and their resources and includes a binding procedure for settlement of disputes between participating states.



Picture 4.3: Republic of Cyprus EEZ boundaries as agreed with Egypt, Lebanon and Israel

4.1.3 The exploration activity in Eastern Mediterranean

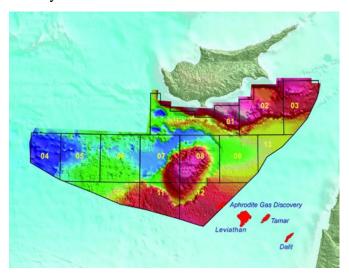
Until the last decade it seemed impossible to have any exploration activity in the Eastern Mediterranean sea, mainly because of the fact that the hypothetical resources (oil and gas) lay in very deep waters, with depths of more than two kilometres in some locations. However, due to the technological advances combined with the high international oil prices, all those resources that until recently remained "undiscovered" in Eastern Mediterranean became viable and attractive for all of the well-known international oil and gas companies. Since, the beginning of the 21st century and after many testing drills the area of Eastern Mediterranean sea, proved to be rich in hydrocarbon resources.

In particular, in 2003 there was the first significant "ultra-deepwater" discovery of natural gas offshore Egypt by Shell, in the Nile Delta. By 2010, a number of seismic surveys were conducted, which estimated that the waters of the Levant Basin, south-east of Cyprus and north-east of the NEMED² block, contain a mean of 3,455 bcm (billion cubic metres) of recoverable natural gas and 1.7 billion barrels of recoverable crude oil.

Furthermore, in January 2009, Nobble Energy of the US in cooperation with some Israeli companies (Anver, Delek Drilling, Isramco) discovered the first large offshore in Israel EEZ called Tamar1 and Dalit1 that contain an estimated reserve quantity of natural gas of approximately 255 bcm. The next major find, and the biggest for the region until today, discovered in 2010, is the Leviathan block which is estimated to hold about 491 bcm of reserves. According to the Israeli Ministry of Energy, proven reserves are expected to reach up to 1,300 bcm by the next few years.

² Nile Delta region: North East Mediterranean (NEMED) block.

Moreover, the Republic of Cyprus started prospecting hydrocarbons in 2006, in an area of 51,000 sq km offshore Cyprus that was divided into 13 blocks. In 2007, and based on the available seismic data, the RoC launched its first international tender for three-year oil and gas exploration licenses for the eleven out of thirteen blocks (block 3 and 13, were excluded). At that time there were only three bids, and only Noble Energy was awarded for Block 12 (known as Aphrodite Block). The first exploratory drilling began on 20th September 2011 and in December of the same year; Nobble announced that it had discovered an estimated mean of 198 bcm. The discovery in Aphrodite Block along with the large reserves in the neighbouring Israeli Leviathan Block increased the interest for the second licensing round for Cyprus Offshore, launched in February 2012.



Picture 4.4: A map of the exploration area offshore Cyprus

The bidders of the second licensing round increased to fifteen (compared to three of the previous one), and the successful bidders was ENI-KOGAS for blocks 2, 3 and 9 and Total for block 11 and 12. Looking at the picture below, it is easy for someone to understand that activity from the well-known Oil and Gas companies occurred in the East Mediterranean Region.



Picture 4.5: Oil & Gas companies' representation in the area of East Mediterranean

4.1.4 Region Reserve Quantities and their significance level

It is well known, that compared to the global gas reserves the findings in Eastern Mediterranean sea is only a tiny portion. However, the importance level - even of those current "small" quantities – is really high, since they can cover the energy needs of the countries that own the reserves, for the next few decades. Furthermore, exploration activity in the Eastern Mediterranean has really only just began and there are expectations in the near future, for additional discoveries of new gas reserves (and may be crude oil), that eventually might be able to cover up to 10% of Europe's annual gas needs.

Proven reserves as of January 2011	Billion cubic metres	Percentage over Global reserves	World Ranking
Russia	44800	24,026%	1
Iran	29610	15,880%	2
Qatar	25370	13,606%	3
Saudi Arabia	7807	4,187%	4
United States	7716	4,138%	5
Aegean, Eastern Med & North Africa			
Algeria	4502	2,414%	10
Egypt	2186	1,172%	17
Libya	1548	0,830%	22
Syria	241	0,129%	43
Israel	198	0,106%	46
Tunisia	65	0,035%	61
Turkey	6,2	0,003%	87
Jordan	6	0,003%	88
Greece	1	0,001%	100
Lebanon	0	0,000%	195
Total World Reserves	186466		-
Cyprus (not yet proven)	198	0,106%	

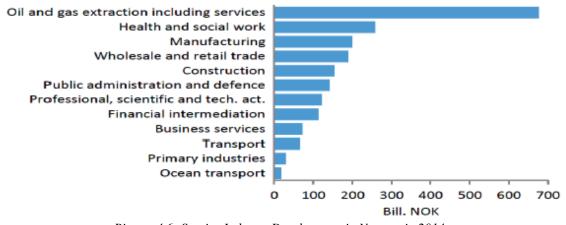
Table 4.1: Oil & Gas companies' representation in the area of East Mediterranean

Having identified the general regional conditions, in regards to the geological, the geographical as well as the current exploration activity in the region that Cyprus belongs to, we can now evaluate further the possibility for Cyprus to become a regional Energy Hub for Eastern Mediterranean. In such a case, it is pretty sure that local CATERPILLAR Dealer (CTC AUTOMOTIVE LTD) should act proactively, in order to be able to respond to the high demand that will be realized because of the development of the Oil and Gas sector as well as the Marine Commercial Sector.

4.2 THE NORWEGIAN MODEL

In our effort to examine all of the advantages that will be realized, in the case that finally Cyprus will develop its gas (and perhaps oil) reserves; we will use some figures from Norway that show exactly this positive perspective.

According to the Cyprus International Business Association (CIBA), in the current Service Industry in Norway which accompanied from sectors such as "Health and Social Work", "Manufacturing", "Whole Sale and retail trade", "Construction" is dominated by the "Oil and Gas Extraction including Services" sector. Having a percentage of approximately 23% over the Gross Domestic Product of Norway, the Oil and Gas sector is leading the economy of Norway.



Picture 4.6: Service Industry Development in Norway in 2014

Furthermore, by looking at some recent statistic figures of the oil and gas industry in comparison to the relative figures five decades ago, the results are impressive. In particular, in 1965 (which was the year just before the first exploration activity) there was not a single employee in the Oil and Gas sector in Norway therefore, zero turnover and nil export value of oil and gas. In conjunction, in 2011 Norway had 230,000 employees in the Oil and Gas Sector a number that represents 10% of the total workforce of Norway and a turnover of the sector of approximately \$014 billion.

Therefore, if we make an assumption - by taking the Norwegian figures and apply them to the Cyprus economy figures - it could be said that, in the next few decades the development of the Oil and Gas Sector in Cyprus could reach an industry turnover of \$5 billion (23% of GDP) and account for 40,000 employees (10% of the workforce). If we consider that Cyprus Hospitality and Tourism sector today which is the driving force of the Cyprus economy, represents a turnover of \$2 billion and a workforce of 30,000 employees; it is easy for someone to understand that the Oil and Gas Industry has the potential to become the most important sector in Cyprus, with all the relative positive impact on the local economy.

4.3 CYPRUS AS A REGIONAL FINANCIAL CENTRE

The indications – since the current gas-reserves, are not yet proven - in regards to the existence of significant hydrocarbon quantities in the exclusive economic zone of Cyprus, as well as the political decision of the Republic of Cyprus to proceed with the first and second round of exploration licensing may prove to be a remarkable opportunity for the island's economy.

Despite the fact, that the second-round testing drills proved "unsuccessful", due to the limited reserves discovered; the findings of Noble Energy for Block 12 is still a positive result that could significantly affect the future of the local economy.

Furthermore, Cyprus as long established international financial centre - and despite the Bank's deposits "haircut" in March, 2013 – is still considered a reliable gateway for investments to and from Eastern Europe. There are many advantages compared to the other countries of the region, such as the favorable tax conditions, the highly educated workforce and the excellent infrastructure facilities.

Therefore, taking in consideration all of the above mentioned factors that combine the strategic geographic location of the island within Eastern Mediterranean Region, the findings of substantial gas reserves in neighbour blocks owned by Israelis, the estimated increased future demand of Europe in gas supply, and the fact that is part and an official member of European Union; give Cyprus a competitive advantage in order to become a regional energy hub. Of course, this will realized only with strategic decision making always within the right time-frame.

4.4 POLITICAL ISSUES AFFECTING THE DEVELOPMENT

Our analysis would be incomplete if we avoid to mention the negative impact of the current political situation in Cyprus. It is well known, that since 1974 Cyprus has been divided, due to the intervention of Turkish troops in the north part of Cyprus. Since then, many attempts were made in order to find a solution to the problem but without a positive result so far. Furthermore, in order to underline the importance of the problem and how that affects the future development of the Oil and Gas sector in Cyprus, it is enough to mention that according to media reports on 31st of July 2012, the governments of the 15 countries whose oil companies were bidding in the second round for Cyprus offshore licenses, were warned by their embassies in Ankara.

Furthermore, on 2nd November 2012 the Turkish Minister of Energy, Taner Yildiz, warned the Italian oil and gas company ENI which, together with KOGAS was initially asked to negotiate licenses in Blocks 2 and 3; that in the case that they would proceed with the agreement with the Republic of Cyprus, the Turkish government would reconsider ENI's investments in Turkey.

Therefore, by giving those examples of Turkey's aggressive policy against the plans of the Republic of Cyprus; it is clearly reasonable that the existence of the Cyprus problem will be always be a big obstacle to any further development of the Oil and Gas Sector. Despite the fact, that all of the giant exploration companies confirm that they do not consider as a real problem the threats from Turkey; it is unfortunately true that Turkey is a very powerful economy that can negatively affect any plans of the Republic of Cyprus, by using as a leverage the large size of its economy.

Chapter 5

MARINE COMMERCIAL, OIL & GAS SECTOR IN CYPRUS

5.1 MARINE COMMERCIAL SECTOR FOR CATERPILLAR

For CATERPILLAR, the Marine Commercial Sector includes a variety of applications and based on the specific needs of each particulate application, offers the appropriate product of its CATERPILLAR Engine's product range.

As you can see on figure 5.1, there are a lot of marine commercial applications that CATERPILLAR engines can fit on to and operate in an efficient and effective way. Each one of those application-segments has certain needs that should be accomplished by the engine manufacturer.



Figure 5.1: Marine Commercial Market Segments

Looking at the above illustrated categories, a brief description of each one is given below:

- The General Commercial Marine application in which the Fishing Boats, the Inland Waterway and the Dredge are included. Working in very tough environments; this kind of boats need reliable engines with robust structure in order to accomplish their mission.
- The Cargo application in which the General Cargo, Container, the Car Carriers, the Bulk Carriers and Tankers are included. CATERPILLAR is considered as the leading manufacturer in this industry, by providing quality system solutions.

- The Offshore Vessels with power requirements like never before. The success in this type of application depends on efficient and dependable marine engines.
- Tug and Salvage Vessels, is another application of Caterpillar that is leading the market.
- Ferry and Cruise Vessels, is the last but not least commercial marine application segment. By offering the world's broadest power range, marine CATERPILLAR diesel products power ferries and cruise vessels around the world.

Having determined the general marine commercial application, it is essential to give some historical figures regarding the number of units that are sold globally into those marine segment-applications.

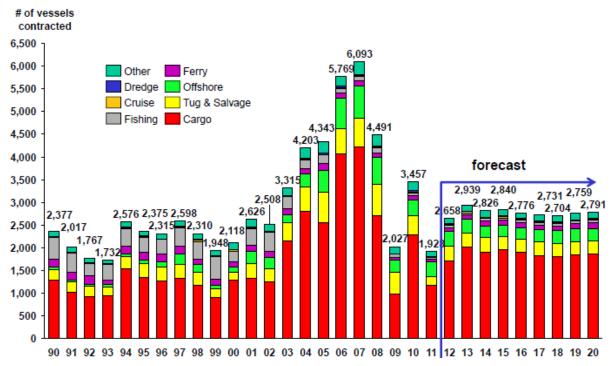


Figure 5.2: Num. of Commercial Vessels Contracted over the last 25 years - forecasting up to 2020, Source: IHS Fairplay, Nov.2011

As it can clearly be observed from the figure 5.2, the majority (more than 50%) of vessels contracted each year are within "Cargo" application segment, with the "Offshore" and "Tug & Salvage" application-segments to follow. Furthermore, the booming of the industry occurred in 2006-2007, and there is no forecasting for another booming period up to 2020. Generally speaking, the forecast for the next five years show a steady trend with total number of contracted vessels to be approximately between 2,500 to almost 3,000 units.

5.2 MARINE COMMERCIAL SECTOR IN CYPRUS

Looking at the application segments of the marine commercial industry, we observe that for the local market some of the categories do not exist. For example, it is very rare to see a Fishing Vessel of that big size to sail in Cyprus seas, and even more unusual to see a Dredge vessel an Inland Waterway. On the other hand, it is very common for many years now to see Cargo vessels, Container Carrier and Cruising ships in Limassol Port as well as in Larnaca Port. Furthermore, within the last few months we have the appearance on a daily base of Oil Tankers and Tugboat vessel in Vassilikos Commercial Port.

Despite the fact, that a majority of commercial vessels in the various application segments have existed on the island for many years and some of them have appeared recently; the representation of the CATERPILLAR Dealer is limited. However, with the beginning of the operation of Vassilikos Terminal and in combination with the activity observed in the Petroleum sector (Oil & Gas) to the EEZ of Cyprus; an alert has been activated from CATERPILLAR principle to CTC management team. The message was clear, that there is a great opportunity for a new market development due to the activity which is observed in the area of the Eastern Mediterranean sea. The actions that have been followed or planned to be performed in regards to this market development are presented in the last chapter of the current thesis project.

At this point of the thesis, we would like to give some further and more detailed information in regards to the profile of some potential customers that already existed in the local market.

5.2.1 Companies' Profile involved in the Marine Commercial Sector

It was a positive surprise for CTC when it started working on the new market development plan for the Marine Commercial sector, the fact that long established companies already exist in the local market and especially in Limassol city where the national port of Cyprus is located. Next we will present the profile of some of those companies aiming to give an understanding of the type of business they represent.

• LAVAR Shipping

Lavar Shipping was established in 1965 and is the flagship company of RPT Group – Reliability, Performance, Trust - one of Cyprus's biggest, privately owned and most reputable, shipping groups. It provides shipping services regionally and globally drawing its strength, from the RPT Group. It is boldly engaged in diverse areas of customized business

solutions and keeps refining its core shipping activities, to take full advantage of the strategic location of Cyprus at the crossroads of Europe, Africa, the Middle East and Asia. Lavar is widely acknowledged as playing a leading role in the evolution of Cyprus shipping and the establishment of the island as a world-class shipping hub. Over the years, the company has evolved into a multi-faceted shipping and ship management services organization offering a wide range of specialized traditional and modern-technology services to the local and international marine industry.

Today it represents a number of prestigious clients protecting their interests and operations in Cyprus: ship owners, managers and operators, global oil companies and traders and is regarded as being a preferred shipping agent operating at Cyprus ports and terminals. It acts as Agent for many global shipping hub agencies, handling all types of vessels, including, tankers, bulk carriers, cruise ships, and container vessels while having a leading role in Shipto-Ship (STS) operations performed off Limassol Port limits as well as at designated points at anchorage. Company's forwarding and Logistics set up, provide for complete cargo solutions to and from Cyprus as well as Crosstrade. Leading importers entrust the company with prompt delivery of their orders as well as perishable traders count on us for safe import/export of their sensitive refrigerated cargo.

• <u>UMAR – WSR</u>

UMAR – WSR was founded in 2000, to offer superior maritime products and services to ship owners and ship management companies. In 2008 UMAR was rewarded with the OEB Innovation Award by the Cyprus Employers and Industrialists Federation, in recognition of its Online Information System (U.O.L.I.S.), which enables continuous project handling information to its customers. Located in Limassol, Cyprus, UMAR – WSR maintains its dedication to offering premium quality maritime products and services to professionals anywhere and at any time globally.

• <u>VTTV Ltd</u>

In November 2014, the €300m VTTV terminal opened for business, designed and constructed by VTTI. VTT Vassilikos Ltd is a company registered in Cyprus, a subsidiary of VTTB.V. VTTI, a joint venture of two companies, owns and operates oil storage terminals in 14 countries. VTTI's shareholders are the Dutch energy giant Vitol, which is the largest private energy trading company in the world, and MISO, a leading international shipping company, owned by the Malaysian state oil company PETRONAS.

The terminal is unique in the Mediterranean, and it will be used for loading and unloading ship-tankers with oil products as well as for oil products transshipment between ship-tankers, which currently takes place in the open sea with all the risk that this entails. The General Manager of VTTV Ltd is Mr. George Papanastasiou and Commercial Manager is Mr. Bart Claassen. Its strategic location makes it the first terminal of its kind in the Eastern Mediterranean, connecting Europe and the Black Sea with markets in the Middle East and Asia. The assets currently comprise of 28 tanks which have a capacity of 544,000 m³, it offers access to a deep water marine jetty as well as to road tanker loading facilities. A Phase 2 expansion is currently under evaluation . This would create an additional 13 tanks and further capacity of 305,000 m³.

VTS

Vasillikos Terminal Services Ltd (VTS) provides its services at the jetty of VTT Vasillikos Ltd (VTTV) oil storage terminal. Under a license agreement signed with the Cyprus Ports Authority (CPA), whereby CPA receives fees, VTS will be providing marine services to the Terminal including pilotage, towage, mooring and sludge collection services. On Saturday November 29, the first Tanker berthed at the VTTV Jetty, delivering Gasoil to the Terminal. As part of the operation, VTS provided towage, mooring, berthing and unberthing services through its two new, ASD tugboats, VTS KERYNEIA and VTS AMMOCHOSTOS.

The tugboats are unique both to Cyprus and the Region, and represent a significant investment of ca. €15 million. Both operate under Cyprus' flag, and are manned by Cypriot and Greek crew and officers. Lavishing praise on VTS for their performance, the first operation was observed by experienced Tug Masters and Tugboat Operators who flew in from the Netherlands specifically for this operation. "VTS has invested heavily in equipment infrastructure in order to perform marine services to the highest international standards, adhering to very strict health and safety procedures, and we are delighted to see this first operation come to a successful conclusion. As a Cyprus-based and owned company we take pride in being able to set an industry standard within our own country, and hope to contribute to the growth and development of the energy and other sectors, as well as to the rejuvenation of the Cypriot economy", stated by Reginos Tsanos; CEO of VTS.

The company – which employs 30 Cypriot professionals – prides itself on the fact that its crew, officers and masters have undergone repeated training abroad with leading organizations in various fields including those of health and safety, and the operation of tugboats.

EDT Offshore

EDT Offshore began operations in Limassol, Cyprus in 1980 as ship managers and operators. After more than thirty years of work dedicated to achieving world-class standards, EDT has become a highly successful and well respected organization in the Middle East Region. EDT is a supplier of high specification offshore support vessels to the Oil and Gas industry worldwide. Additionally, EDT's vessels support survey, diving and ROV operations and have assisted in military and civilian aircraft wreckage recoveries. From its home port of Limassol EDT, it provides services to the local Oil and Gas industry such as a dedicated quay, a heliport and ships agency services.

By going through the profiles of the most well-known companies of the sector, that are operating in the local market for many years now, it is easy for someone to understand that CTC is going to establish a new market development program in regards to the CATERPILLAR products, however the market has existed locally for a lot of years. Therefore, it is one of the additional goals of this project to find out how all these "customers" were served in regards to the CATERPILLAR products. It should be a common practice strategy for them when they need support for their CATERPILLAR product.

5.3 OIL AND GAS INDUSTRY FOR CATERPILLAR

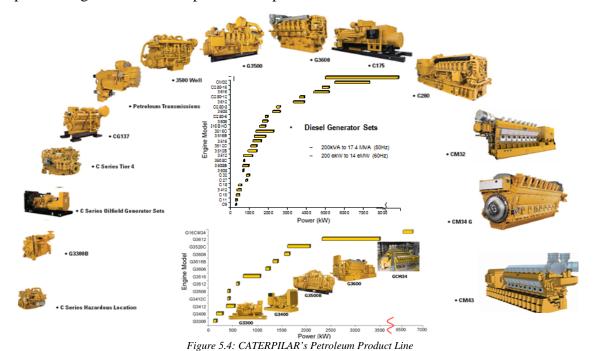
As in the case of the Marine Commercial sector, there are also application segments in the Oil and Gas Sector (or Petroleum Industry, as it is commonly called). Therefore, the industry is divided to the following segments:



Figure 5.3: Oil and Gas (Petroleum Sector) Segments

- *Drilling Segments*, where we have CATERPILLAR engines on the "Drillships", the "Land Power Products", the "Jackup Rigs", the "Mud Pumps" and "Emergency Genset" units.
- *Production Power*, where we meet CATERPILLAR engine products on Offshore Platforms, Refineries, Air Compressors, Downhole pumps, Fire pumps etc.
- *Gas Compression*, in Gas Processing plants, for Primary Gathering, on Well Head, on Transmission Station etc.
- *Well Service*, where CATERPILLAR engines are serving for Cementing applications, Well Fracturing, Workshop Pumps etc.

At this point, it is worthy to mention that CATERPILLAR is the leading manufacturer in that industry with the broadest product line in the Petroleum Industry. Engines ranking from 200 KVA up to 17.4 MVA operating by diesel fuel, and gasoperated engines that reach up to electric power of more than 8 MVA.



5.4 OIL AND GAS SECTOR IN CYPRUS

In contradiction, compared to the Marine Commercial Sector, the Petroleum Sector is indeed something new for the local market. This particular industry started becoming widely known by many local companies, after the decision of the government of the Republic of Cyprus to go ahead with the drilling licenses. Furthermore, there is also a representation of some giant international organizations that have recently established their representation on the island.

5.4.1 Companies' Profile involved in the Petroleum Sector

Hereunder, we will see the profile of some of those companies in an effort to understand their local needs; if there are any.

• TOTAL S.A.

TOTAL S.A. is a limited company, incorporated in France in March 1924 and listed on the Paris, Brussels, London and New York stock exchanges. It has the highest market capitalization on the Paris stock exchange, at €101.4 billion at end-2014. The company is led by Chairman of the Board of Directors Thierry Desmarest and Chief Executive Officer Patrick Pouyanné. With 100,000 employees and operations in more than 130 countries, it is considered to be the Fourth-Largest Global Oil and Gas Company. TOTAL produces, refines and markets oil and manufacture petrochemicals. It is also a major player in natural gas and rank second in solar energy with SunPower. Total's priority is to supply its customers around the world with safer, cleaner, more efficient and more innovative products. Demonstrating its commitment to better energy it works alongside with its stakeholders to ensure that operations consistently deliver economic, social and environmental benefits. The areas of its expertise where it is also a market leader is the "Exploration & Production" for oil and natural gas exploration, "Gas & Power" with capabilities such as spanning the liquefied natural gas chain, from liquefaction to shipping and regasification, as well as natural gas marketing, "Refining & Chemicals" with a major production hub and with expertise covering refining, petrochemicals etc., "Trading & Shipping" by being a leading global trader of oil and petroleum products, "Marketing & Services" with a broad array of refined products, including automotive fuel and specialty products such as lubricants, special fluids, LPG, heating and heavy fuel oil, asphalt, additives and special fuels, and finally "New Energies" is helping them to prepare the energy future by developing our expertise in two core renewable energies, such as solar and biomass. All these together, constitute a broad product and service line provided by TOTAL S.A. As already mentioned, TOTAL has won part of the second offshore exploration licensing round for blocks 10 and 11 in Cyprus' EEZ.

• Noble Energy, Inc

Noble Energy, Inc. of Houston, Texas, United States is the modem name of Noble Affiliates Inc., by which it was known through the 1990s. Founded by Lloyd Noble in 1932 Noble Energy has 80 years of success in the energy industry. The Chairman is also the CEO, & President is Mr. Charles D. Davidson Noble Energy is now an oil and natural gas exploration and production company. The company operates in Argentina and Nicaragua. In

Africa, Noble Energy operates in Equational Guine Cameroon. It operates in the Mediterranean Sea, in Israel and Cyprus. It also has office in China oble. Today, Noble Energy is an S&P 500 company with reserves of 1.4 billion barrels of oil equivalent and assets over \$19 billion per year-end 2013. Noble Energy is recognized for innovation, flexibility, exploration proficiency and technical capabilities in developing hydrocarbon resources. As already mentioned, it has won the first offshore exploration licensing round for block 12 (known as "Aphrodite") in Cyprus' EEZ.

• ENI - KOGAS

ENI - KOGAS are two companies: ENI is an Italian company and KOGAS is a Korean company which both are under a consortium named "ENI-KOGAS" and they are currently involved in the oil and gas sector in Cyprus. In particular, they have partially won the second offshore exploration licensing round for blocks 10 and 11 in Cyprus' EEZ.

ENI abbreviates of "Ente Nazionale Idrocarburi" (which means "State Hydrocarbons Authority"), is an Italian energy company established in 1953. ENI is an outgrowth of Agip, an oil and gas agency set up by the Italian fascist government in the 1920s. ENI is active in 85 countries with 82.300 employees and, is one of the largest integrated energy companies in the world, operating in the sectors such as oil and gas exploration & production, International gas transportation and marketing, Power generation and finally refining and marketing, chemicals and oil- field services. ENI's commitment to sustainable development is that they grow and retain their people, by contributing to the development and communities in which they operate, protect the environment, and invest in technological innovation and energy efficiency while mitigating the risks of climate change.

KOGAS on the other hand is an abbreviation for Korea Gas Corporation, was incorporated by the Korean government in 1983, who in 1999 began to privatise the company. Consequently, KOGAS is currently shared between the South Korean government, with a 27% stake and the state controlled Korea Electric Power Corporation (KEPCO) with 25%, with the remaining equity split among local government and institutional investors. Since its founding, it has grown to become the world's largest LNG importer. As the nation's sole LNG provider, the Corporation is fully committed to providing clean, safe and convenient energy to the people of Korea. The company employs 3000 employees and operates three LNG terminals and a nationwide pipeline network spanning over 3,022km in order to ensure stable supply for the nation. KOGAS imports LNG from around the world and supplies it to power generation plants, gas-utility companies and city gas companies throughout the country. It produces and supplies natural gas, purifies and sells gas-related by-products, builds and

operates production facilities and distribution network, and explores imports and exports natural gas for domestic and overseas markets. KOGAS received the sovereign credit rating of A1 and A, the highest credit rating ever given to a Korean company by the Moody's and S&P. On the foundation of its accumulated experience and expertise, the Corporation is actively developing new technologies, expanding the scope of businesses, and participating in foreign projects in our efforts to realize our goal of becoming a leading integrated energy company in the world.

• HALLIBURTON

Halliburton is an American multinational corporation, and one of the world's largest oil field services companies with operations in more than 80 countries. It owns hundreds of subsidiaries, affiliates, branches, brands, and divisions worldwide and employs approximately 100,000 people. The company has dual headquarters located in Houston and in Dubai and remains incorporated in the United States. Halliburton's major business segment is the Energy Services Group (ESG). ESG provides technical products and services for petroleum and natural gas exploration and production. Halliburton's former subsidiary, KBR, is a major construction company of refineries, oil fields, pipelines, and chemical plants. The company has been involved in numerous controversies, including the Deepwater Horizon explosion, for which it agreed to settle outstanding legal claims against it by paying litigants \$1.1 billion.

Since October 2014, Halliburton has started its operations from its own facilities in Industrial Area of Arhadippoy that are used to cover the needs of the exploration activities in Cyprus EEZ as well the whole region. Initially, the company has employed 45 employees and as Halliburton's Vice President – Mr. Mark Richard, stated: "The Eastern Mediterranean Region plays an important role in the expansion of Halliburton in the eastern hemisphere. We are excited about the construction of these facilities which will benefit both Halliburton and the Republic of Cyprus and of course its customer to the region."

By introducing the well-known, international, giant companies that have started their operation in Cyprus, we are now able to understand the size of the long-term opportunities. Despite the fact that the giant companies mentioned above, use CATERPILLAR engines, there was apparently a limited request – so far – in regards to the support of their CATERPILLAR products. Only Halliburton asked and got the technical support of CTC when the commissioning of their new CATERPILLAR C18 Engine had to be done. The reasons for the limited request will be explained in the next and last chapter of the current thesis project.

Chapter 6

CONCLUSIONS AND PROPOSALS

6.1 BUSINESS IDEA

Our "Business Idea" is to grow our CATERPILLLAR business volume on a higher quantitative and qualitative level, always in a proper manner and without high capital investment. This can be possible, by making decisions that influence the internal organization structure and by making on the other hand some strategic agreements with other companies or organizations, on the basis of course of the "win-win" principle.

It is essential to establish a structure that will have the ability and flexibility to cover the demand that is expected to be gradually increased within the next few years for the Marine Commercial as well for the Petroleum sectors. The ultimate goal, of the current business plan proposal in regards to a new market development strategy of CTC in regards to both sectors, is to build-up a long term relationship with the potential customers, aiming to become a product support partner for their existing CATERPILLAR products.

6.2 POTENTIALS AND OPPORTUNITIES

Despite the last disappoining results, of the testing drills performed by ENI-KOGAS in blocks 2, 3, 9 and TOTAL in blocks 10, 11; there is still a great opportunity for further development of the Marine Commercial and Petroleum Sector.

The proven natural gas reserves in the Eastern Mediterranean region, the estimated (not proven) reserves of natural gas in block 12 of Cyprus' EEZ as well as the plans for extension and development of the Vassilikos Terminal located few kilometres outside Limassol are the main reason that we believe that the increasing trend on both sectors will continue and might be rapid.

During the last few months, CTC has received requests from customers that were not in its customer portfolio. Therefore, CTC has taken the messages coming from the market itself very seriously; and this is one of the reasons we performed the current thesis project. Hereunder, some proposals are presented to CTC's principles, in order to establish a business framework that could respond to the future demand.

6.3 PROPOSALS FOR THE PETROLEUM SECTOR

Despite the fact, that the representation of some giant international companies such as Noble, TOTAL, ENI-KOGAS, Halliburton is already evident in the local market; the requests we received from them for CATERPILLAR products and services is limited. This is not unexpected for two main reasons:

- They buy their brand new CATERPILLAR Engines from the largest CATRERPILLAR Dealers in Europe such us CGT, PON, FINNING, through long-term sales and service contracts.
- They have their own experienced technicians that can perform services and repairs on CATERPILLAR Engines in a proper and professional manner.

Therefore, there are not a lot of things to do in regards to the Oil and Gas market since the criteria for "competing" with the traditional (giant in size and in resources) CATERPILLAR is very difficult and requires a high capital investment.

However, there is something that could and must be done in order to get a competitive advantage "against" the rest CATERPILLAR Dealer of the region. A "Confidential Agreement" between CTC and one of the leading CATERPILLAR Dealer, will be very beneficial for CTC, in terms of better understanding of the petroleum sector needs as well as access to technical information and projects that might perform in the region. On the other hand, the benefit for a big CATERPILLAR Dealer will be access through CTC to the local institutions.

At this point, I would like to admit that during the last year a lot of meetings have been carried out with some of the leading CATERPILLAR Dealers, and CTC is very close to come in an agreement with one of the most traditional and well-known Dealers in Europe. If this is accomplished, it would be a very good step forward in CTC's efforts to establish a business model framework that could respond directly to get the support of another Dealer with a lot more experience on the very demanding Oil & Gas Sector.

Furthermore, it is essential for CTC to invest on its workforce and educate some of its employees in order to get a better understanding of this particular market. It is the least, for CTC to have at least some employees who have a good perspective not only on products, and services but also on the needs of the customer of the Petroleum sector.

6.4 PROPOSALS FOR THE MARINE COMMERCIAL SECTOR

On the other hand, things are considered better than in the Petroleum Sector, in terms of getting direct requests for product support from companies that are operating in the Marine Commercial Sector and have CATERPILLAR products on their vessels. As it mentioned in Chapter 5, CATERPILLAR engines are installed in a variety of vessels - in different segments, that already exist in the local market.

Once Vassilikos Terminal operated; has been observed an increased demand for product support for CATERPILLAR Engines. Moreover, we have had cases that the requests came from companies that own offshore vessels that were "pit-stop" in Limassol Port and then continue their trip, in order to go to Israel or to Egypt to provide support on the wells' operations.

Having observed this progressive demand, it is mandatory for CTC to develop a marine organization structure with roles focused on the marine business. Caterpillar Marine products are very specific for the marine industry and they are continuously being upgraded and evolving. CTC staff must be able to provide value to their marine customer by offering the latest solutions for Caterpillar Marine products. Despite the fact, it might not be possible within the next few years to sell brand new engines to the Marine Commercial Sector – because of the fact that the engines are purchased from the ship builders from the largest CATERPILLAR Dealer – it is proven that there is a great opportunity in regards to the product support of this sector. The term "Product Support" refers for the spare parts supply and the ability to provide technical services on board.

At this moment, CTC has limited resources that are concentrated to the Marine Industry and the know-how in regards to this industry is basic. Therefore, the ability to respond to this type of demand is limited, as well. The proposed actions listed below, could give the ability to CTC to represent adequately, the Maine Commercial Caterpillar products locally and regionally.

As we already mentioned, it is essential for CTC to establish an organizational structure of the Caterpillar division that will focus on Marine Business. This action item includes the existence of a Marine Segment Manager, responsible for profitable growth and leadership. Furthermore, a Key Account Manager is also essential as a point of contact for key customers. Moreover, for the product support in the Marine Commercial Sector, CTC should create a Service Team (within the company or with some joint venture with another Service Point) of at least four technicians specialized in the marine sector.

Furthermore, the physical representation of CTC in Limassol is also an action that should be dealt with as soon as possible. Limassol is the heart of Marine Commercial business because of the Limassol International Port and Vassilikos Terminal which is close to Limassol as well. Furthermore, a CATERPILLAR Service Point in Limassol could also serve Limassol Marina which hosts a valuable number of Pleasure Crafts that are powered by Caterpillar engines.

By applying the above proposed actions, CTC will manage to pass this transition stage of the new market development for both the Marine Commercial and Oil & Gas sector in Cyprus. On the other hand, those actions will prepare the conditions, when the time comes; to respond efficiently to the expected high demand in the long-run.

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